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___OF___

WORCESTER COUNTY,

MASSACHUSETTS.

PUBLISHED BY THE

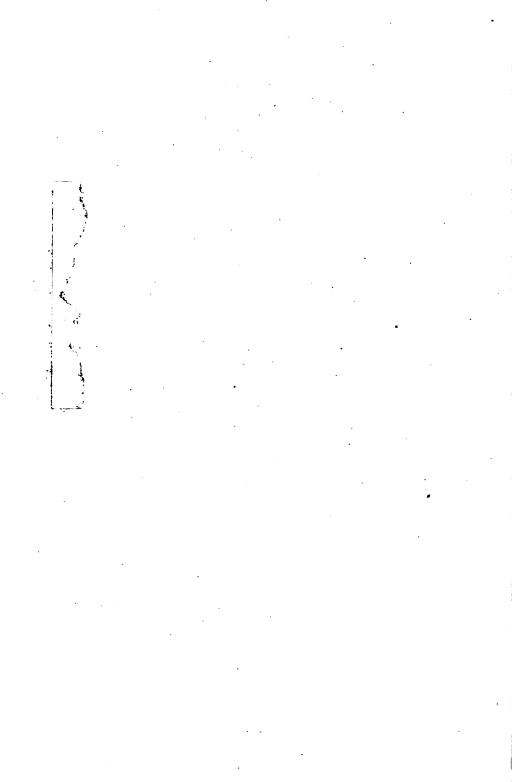
WORCESTER NATURAL HISTORY SOCIETY.

WORCESTER, MASS., U. S. A.

1883.







CATALOGUE

1

OF THE

PHÆNOGAMOUS AND VASCULAR CRYPTOGAMOUS

PLANTS OF WORCESTER COUNTY,

MASSACHUSETTS.

BY

JOSEPH JACKSON,

WORCESTER, MASS.

PUBLISHED BY THE
WORCESTER NATURAL HISTORY SOCIETY,
WORCESTER, MASS., U. S. A.

KF . 6140

Com Man Caire,

Charles Star

PRESS OF CHAS. HAMILTON, WORCESTER,

MASS.

PREFACE.

It was at first the intention of the writer to prepare a Catalogue of the Plants of Millbury, one of the towns in the southern part of Worcester County, in which his own collections had been quite carefully made during the past four or five years. The number of plants to be found in the small area comprised within the limits of one town could thus be easily shown. While departing somewhat from the original plan, the present catalogue may be made a little more useful from its broader scope, although lacking in the completeness which it might have attained on the smaller It is hoped that the publication of the present catalogue may lead to further additions to our knowledge of the flora, both phenogamic and cryptogamic, of the county, so that as complete a catalogue as possible may within a few years be prepared.

The present list contains eight hundred and twelve species and well-marked varieties, distributed among three hundred and eighty-seven genera. Of this number six hundred and twenty-five species are found in Millbury. The locality of those found elsewhere has been indicated, so far as known, by at least one reference.

Worcester County extends across the State of Massachusetts from north to south. On its southern or Rhode Island margin it is allied by its flora to Southern New England. On its northern or New Hampshire margin it is allied to Northern New England. It lies at altitudes varying from 200 ft. to 2,500 ft. above the sea level. Only one point, Mt. Wachusett, reaches the latter height. The surface is greatly diversified by ranges of hills, within the valleys formed by which are the water-courses so largely

used for manufacturing purposes, and the natural or artificial reservoirs used for water-supply. It is a thickly-wooded region, with many kinds of valuable timber trees, as the white pine, white ash, white oak, hickory, chestnut, rock maple, &c.

The intervales along the rivers are rich, but the soil of most uplands and pastures is poor, yet not without a due reward to the labor of the industrious husbandman.

In the preparation of this list, so far as it contains names of plants found in other towns than Millbury, the writer is under great obligations to Prof. T. E. N. Eaton of Worcester, who has botanized extensively in the county, and furnished valuable aid, as will be seen by referring to the list itself. For the list of species under the genera *Naias* and *Potamogeton*, he is indebted to the courtesy of Rev. Thomas Morong of Ashland, who has collected those genera very extensively and has also had access to the collection and papers of the late Dr. Robbins of Uxbridge; the series of Potamogetons presented to the Worcester Natural History Society by Miss Emily W. Sargent of Worcester was also of great use.

Mr. E. Adams Hartwell of Fitchburg, Prof. James E. Vose of Ashburnham, Capt. V. P. Parkhurst of East Templeton, and Miss Annie E. Tucker of Spencer, either kindly contributed living specimens of plants not found in this locality, or gave authentic information with regard to them. The late Mr. Cyrus Kilburn of Lunenburg, the veteran botanist of the northern part of the county, sent us specimens of the Linnaea, Raphanus, and Arrhenatherum, and had promised us further help, but, alas!

Eheu! fugaces, Postume, Postume, Labuntur anni, nec pietas moram Rugis et instanti senectae Afferet indomitaeque morti.

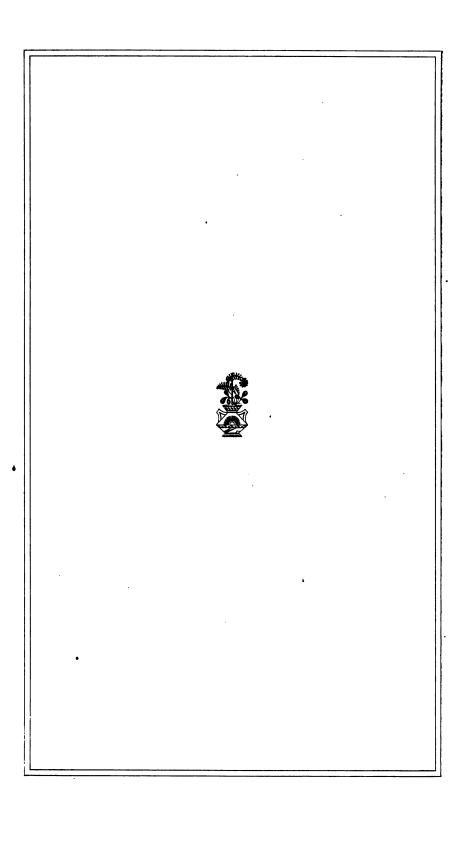
Our thanks are due and are herewith tendered to the kind friends whose assistance has rendered our work possible. It is our hope that the present publication of this list may stimulate some of the young citizens of our towns and of the county to a further search in wood, pasture and meadow, lake and river, on hill-side and in the valley for the beauties, and no less for those inconspicuous and often overlooked plants, which a kindly Nature has distributed with so lavish a hand over every part of our limits, and that at the same time they may carefully record the names and habits of every plant so found. The work of the Worcester Natural History Society would be greatly aided by the presentation of specimens of the flora of the county, prepared for the herbarium, so that there might be at least one place in the county in which a citizen of this region might find a representative of every plant to be found within the limits of its work.

It may be remarked that the names in this catalogue are the same as in the last edition of Gray's Manual of the Botany of the Northern United States.

It is not thought wise to use names which are found in recent works not easily accessible to Students; otherwise *Rhodora Canadensis* would have appeared as *Rhododend-ron Rhodora*, and both our Azaleas would have appeared under the same genus, with many similar changes. No attempt has been made to distinguish between indigenous and introduced plants, as that work is completely done in the Manual.

WORCESTER, MASS.,

September, 1883.



CATALOGUE OF PLANTS

WORCESTER CO., MASS.

POLYPETALOUS EXOGENS.

RANUNCULACEÆ.

CLEMATIS, L. Virgin's Bower.

Virginiana, L. Common.

ANEMONE, L. Anemone.

> Virginiana, L. Common. nemorosa, L. Very abundant.

HEPATICA, Dill. Liverleaf. triloba, Chaix.

Meadow Rue. THALICTRUM, Tourn.

anemonides, Michx. Common.

dioicum, L. Rather rare.

Cornuti, L. Abundant in low grounds.

RANUNCULUS, L. Buttercup.

multifidus, Pursh. Pools, Grafton.

abortivus, L. In low grounds.

recurvatus, Poir. In woods. fascicularis, Muhl. In upland woods.

var. Sunnyside, Worcester, Prof. T. E. N. Eaton.

repens, L.

bulbosus, M. Common in meadows.

acris, L. Common in meadows and on roadsides.

Caltha, L. Marsh-marigold. Cowslip, but not of literature. palustris, L. Common in brooks and marshes.

COPTIS, Salisb. Gold-thread.

trifolia, Salisb. Common in swamps.

AQUILEGIA, Tourn. Columbine.

Canadensis, L. On dry hillsides.

ACTÆA, L. Baneberry.

spicata, L. var. rubra, Michx. In copses.

alba, Bigel. With the last.

BERBERIDACEÆ.

BERBERIS, L. Barberry.

vulgaris, L. Rare in the northern part of the county.

CAULOPHYLLUM, Michx. Pappoose-root. thalictroides, Michx. Princeton.

Podophyllum, L. May apple. peltatum, L. West Boylston.

NYMPHÆACEÆ.

Brasenia, Schreber. Water-shield. peltata, Pursh. Boylston.

NYMPHÆA, Tourn. Pond Lily. odorata, Ait. Common.

NUPHAR, Smith. Yellow Pond Lily.

advena, Ait. Common.

luteum, Smith, var. pumilum, Gray. Southbridge.

SARRACENIACEÆ.

SARRACENIA, Tourn. Pitcher plant. purpurea, L. Not rare.

PAPAVERACEÆ.

PAPAVER, L. Poppy.

somniferum, L. Sutton.

CHELIDONIUM, L. Celandine.

majus, L. Waste grounds near dwellings.

SANGUINARIA, Dill. Bloodroot.

Canadensis, L. Common in moist meadows.

FUMARIACEÆ.

ADLUMIA, Raf. Climbing Fumitory. cirrhosa, Raf.

CORYDALIS, Vent. Corydalis. glauca, Pursh. In dry woods.

CRUCIFERÆ.

NASTURTIUM, R. Br. Water-cress.

officinale, R. Br. Common.

palustre. DC. Common.

Armoracia, Fries. Escaped from cultivation.

CARDAMINE, L. Bitter-cress. hirsuta, L. In marshes.

Arabis, L. Rock-cress.

perfoliata, Lam. Worcester, Eaton.

BARBAREA, R. Br. Winter-cress.

vulgaris, R. Br.

SISYMBRIUM, L. Hedge Mustard.

officinale, Scop. Worcester, Eaton.

Brassica, Tourn. Mustard. nigra, Gray. Common.

Capsella, Vent. Shepherd's Purse.

Bursa-pastoris, Mench. Common.

LEPIDIUM, L. Pepper-grass.

Virginicum, L. Common.

RAPHANUS, L. Radish.

Raphanistrum, L. Lunenburg, Mr. Kilburn.

VIOLACEÆ.

VIOLA, L. Violet.

rotundifolia, Michx. Damp woods, rare. lanceolata, L. Wet grounds, common. primulæfolia, L. Worcester, Eaton. blanda, Willd. Common. cucullata, Ait. Common. sagittata, Ait. On dry grounds. pedata, L. On dry grounds. canina, L. var. sylvestris, Reg. In thickets. pubescens, Ait. Copses. Not common.

CISTACEÆ.

HELIANTHEMUM, Tourn. Rock Rose.

Canadense, Michx. Common in dry grounds.

LECHEA, L. Pinweed.

major, Michx. Templeton, Mr. V. P. Parkhurst.

DROSERACEÆ.

Drosera, L. Sundew.

rotundifolia, L. In marshes. longifolia, L. Margin of ponds.

HYPERICACEÆ.

HYPERICUM, L. St. John's Wort.

Canadense, L. Common, roadsides, in marshy places.

corymbosum, Muhl. In copses.

ellipticum, Hook. In low grounds. mutilum, L. In low grounds.

perforatum, L. In pastures and on roadsides.

Sarothra, Michx. In dry grounds.

ELODES, Adans. Marsh St. John's Wort. Virginica, Nutt. Common, swamps.

CARYOPHYLLACEÆ.

DIANTHUS, L. Pink.

Armeria, L. Dry pastures.

Saponaria, L. Soapwort.

officinalis, L. Escaped from gardens.

SILENE, L. Catchfly.

inflata, Smith. Meadows.
noctiflora, L. Rare. Dr. G. C. Webber.

ARENARIA, L. Sandwort.

Grænlandica, Spreng. Ashburnham. Vose. Rare.

lateriflora, L.

STELLARIA, L. Chickweed.

media, Smith. Common around dwellings.

longifolia, Muhl. In low grounds.

borealis, Bigel. Woods.

CERASTIUM, L. Mouse-ear Chickweed.

viscosum, L. Common. arvense, L. "

Sagina, L. Pearlwort.

procumbens. Rare. Pastures.

Spergularia, Pers. Sand-Spurrey.

rubra, Presl., var. campestris, Gray. Sidewalks.

Spergula, L. Spurrey.

arvensis, L.

ANYCHIA, Michx. Forked Chickweed.

dichotoma, Michx. Worcester, Eaton.

Mollugo, L. Indian Chickweed.

verticillata, L. Common in cultivated grounds.

PORTULACACEÆ.

Portulaca, Tourn. Purslane.

oleracea, L. Very common in cultivated grounds.

CLAYTONIA, L. Spring-Beauty.

Caroliniana, Michx. Somewhat rare. Worcester, Holden, Stearns. Ashburnham.

MALVACEÆ.

Malva, L. Mallow.

rotundifolia, L. Common.

sylvestris, L. Royalston, Eaton.

crispa, Gray. """

moschata, L. Escaped from cultivation.

TILIACEÆ.

TILIA, L. Basswood.

Americana, L. Common.

GERANIACEÆ.

GERANIUM, L. Cranesbill.

maculatum, L. Common. Roadsides.

Carolinianum, L. Cultivated grounds.

Robertianum, L. Mt. Wachusett, Eaton. Worcester, George Coult.

ERODIUM, L'Her. Storksbill. cicutarium, L'Her. Not common. Spreading.

IMPATIENS, L. Balsam. fulva, Nutt. Common in moist places.

Oxalis, L. Wood Sorrel.

acetosella, L. Templeton, V. P. Parkhurst.

violacea, L. "

stricta, L. Common in woods.

RUTACEÆ.

Zanthoxylum, Colden. Prickly Ash.

Americanum, Mill. Not common.

ANACARDIACEÆ.

Rhus, L. Sumach.

typhina, L. In pastures and copses.

copallina, L. Common,

glabra, L. Common.

venenata, DC. Swamps.

Toxicodendron, L. Along walls and fences.

VITACEÆ.

VITIS, Tourn. Grape.

Labrusca. Common.

cordifolia. Not so common as last.

AMPELOPSIS, Michx. Woodbine.

quinquefolia, Michx. Abundant.

RHAMNACEÆ.

RHAMNUS, Tourn. Buckthorn. catharticus, L. Roadsides. Ceanothus, L. New Jersey Tea. Americanus, L. Common in thickets.

CELASTRACEÆ.

CELASTRUS, L. Shrubby Bittersweet. scandens, L. Common.

SAPINDACEÆ.

ACER, Tourn. Maple. Pennsylvanicum, L. Striped Maple, common. spicatum, Lam. Mountain Maple, Princeton. saccharinum, Wang. Common Rock Maple. dasycarpum, Ehrh. Northern part of county. rubrum, L. Red Maple.

POLYGALACEÆ.

Polygala, Tourn. Polygala. paucifolia, Willd. Common in woods. polygama, Walt. Sandy soil, Auburn. sanguinea, L. Common in moist places. verticillata, L. In pastures.

LEGUMINOSÆ.

LUPINUS, Tourn. Lupine. perennis, L. Not common.

Trifolium, L. Clover.

arvense, L. Common.

pratense, L.

hybridum, D. C. Eaton. South Worcester, Eaton. repens, L. Common.

agrarium, L. Rarer than preceding. procumbens, L. Smallest and rarest of our clovers.

MELILOTUS, Tourn. Sweet Clover.

alba, Lam. Common.

MEDICAGO, L. Medick.

lupulina, L. Worcester, Mr. Kinney.

denticulata, Willd. Gardens.

TEPHROSIA, Pers. Hoary Pea.

Virginiana, Pers. Not abundant.

DESMODIUM, DC. Tick-Trefoil.

acuminatum, DC. In woods.

Canadense. DC. Common on roadsides.

ciliare, DC. In dry woods.

laevigatum, DC., var. monophyllum. Rare

Marilandicum, Boott. In dry woods.

nudiflorum, DC. Not common.

paniculatum, DC. Thickets.

rigidum, DC. In dry woods.

rotundifolium, DC. Under pine trees.

LESPEDEZA, Michx. Bush-Clover.

violacea, Pers. Roadsides and thickets.

hirta, Ell. Common.

capitata, Michx. "VICIA, Tourn. Vetch.

Sativa, L.

Cracca, L.

APIOS, Boerhaave. Ground Nut.

tuberosa, Moench. Common.

AMPHICARPÆA, Ell. Hog Peanut.

monoica, Nutt. Common.

Baptisia, Vent. False Indigo.

tinctoria, R. Br. Common in pastures.

Cassia, L. Senna.

Chamæcrista, L. North Worcester, Eaton. nictitans, L.

ROSACEÆ.

Prunus, Tourn. Cherry.

Pennsylvanica, L. Common, roadsides and woods.

Virginiana, L. Common.

serotina, Ehrh. Along with last.

SPIRÆA, L. Meadow Sweet.

salicifolia, L. Pastures and low meadows.

tomentosa, L. Hardhack, common.

Poterium, L. Burnet.

Canadense, Gray.

AGRIMONIA, Tourn. Agrimony.

Eupatoria, L. Copses.

GEUM, L. Avens.

album, Gmelin. Mt. Wachusett, Eaton.

Virginianum, L. Thickets.

rivale, L. Swampy meadows.

POTENTILLA, L. Cinquefoil.

Norvegica, L. Pastures.

Canadensis, L. Very common. Var. simplex, Torr. and Gray.

argentea, L. Common in dry grounds.

fruticosa, L. Groton, Eaton. Mt. Wachusett. tridentata, Ait.

Strawberry. Fragaria, Tourn.

> vesca, L. Common. Pastures.

Dalibarda, L. Dalibarda.

repens, L. Northern part of the county.

RUBUS, Tourn. Bramble.

odoratus, L. Princeton.

triflorus, Richardson. Swamps.

strigosus, Michx. Along fences, and in thickets. occidentalis, L. With the last.

villosus, Ait. Common in thickets. Canadensis, L. Common in pastures.

Sandy soil and in swamps. hispidus, L.

Rosa, Tourn. Rose.

Carolina, L. Swamps.

lucida, Ehrh. Roadsides, common.

rubiginosa, L. Pastures, not common. CRATAEGUS, L. Hawthorn.

coccinea, L. Common in thickets.

Pyrus, L. Pear, Apple, &c.

arbutifolia, L. Common in huckleberry pastures.

Americana, DC. Mt. Wachusett. AMELANCHIER, Medic. June-berry.

Canadensis, Torr. and Gray. Very common.

SAXIFRAGACEÆ.

RIBES, L. Currant. Gooseberry.

Cynosbati, L. Mt. Wachusett, Eaton.

hirtellum, Michx. In thickets.

rotundifolium, Michx. Brooks' Station, B., B. & G. R. R., *Eaton*.

prostratum, L'Her. Mt. Wachusett.

Parnassia, Tourn. Grass of Parnassus.

Caroliniana, Michx. Not common.

Saxifraga, L. Saxifrage.

Virginiensis, Michx. Very common.

Pennsylvanica, L. Swamps, abundant.

MITELLA, Tourn. Mitrewort.

diphylla, L. Princeton.

Tiarella, L. False Mitrewort.

cordifolia, L. Princeton, Worcester.

CHRYSOSPLENIUM, Tourn. Golden Saxifrage.

Americanum, Schw. In brooks and pools.

CRASSULACEÆ.

Penthorum, Gronov. Ditch Stone Crop. sedoides, L. Common in low lands.

SEDUM, Tourn. Stone Crop.

ternatum, Michx. Worcester, Eaton.

Telephium, L. Not rare.

HAMAMELACEÆ.

Hamamelis, L. Witch-Hazel. Virginica, L. Common in copses.

HALORAGEÆ.

PROSERPINACA, L. Mermaid weed. palustris, L. Brooks.

ONAGRACEÆ.

CIRCÆA, Tourn. Enchanter's Nightshade.

Lutetiana, L. Common in thickets.

alpina, L. Purgatory, Sutton, Spencer, Miss
Tucker.

Epilobium, L. Willow herb.

angustifolium, L. Common in clearings.

palustre, L., var. lineare, Gray. In low lands.

coloratum, Muhl. With the last.

OENOTHERA, L. Evening Primrose. biennis, L. Common. fruticosa, L.

pumila, L. Common.

Ludwigia, L. False Loosestrife.

alternifolia, L. In swamps.

palustris, Ell. Swamps.

MELASTOMACEÆ.

RHEXIA, L. Meadow-Beauty.

Virginica, L. Sutton, Leicester, Miss Tucker.

LYTHRACEÆ.

LYTHRUM, L. Loosestrife. Salicaria, L.

NESÆA, Juss. Śwamp Loosestrife.

verticillata, H. B. K. Swamps. Not common.

CUCURBITACEÆ.

Sicyos, L. One-seeded Star-Cucumber. angulatus, L. In thickets.

UMBELLIFERÆ.

HYDROCOTYLE, Tourn. Water Pennywort. Americana, L. Common in damp woods.

Sanicula, Tourn. Sanicle.

Canadensis, L. At Lake Quinsigamond, Eaton. Marilandica, L. Common in copses.

Daucus, Tourn. Carrot. Carota, L. Common.

Heracleum, L. Cow Parsnip.

lanatum, Michx. In low grounds.

Pastinaca, Tourn. Parsnip.

sativa, L. Common. Roadsides.

Archangelica, Hoffm. Archangelica. atropurpurea, Hoffm. In low grounds.

THASPIUM, Nutt. Meadow Parsnip. aureum, Nutt. Common, Meadows.

Water-Hemlock. CICUTA, L. · maculata, L. Wet meadows.

SIUM, L. Water-Parsnip. lineare, Michx.

OSMORRHIZA, Raf. Sweet Cicely.

longistylis, DC. Worcester, Eaton.

brevistylis, DC. CONIUM, L. Poison Hemlock.

Wet meadows. Common. maculatum, L.

ARALIACEÆ.

ARALIA, Tourn. Ginseng.

racemosa, L. Rare.

hispida, Michx. Common in woods and clearings.

nudicaulis, L. Common.

quinquefolia, Gray. Rare, in rocky woods. trifolia, Gray. Very common.

CORNACEÆ.

Cornus, Tourn. Dogwood, "American Boxwood." (Not poisonous.)

Canadensis, L. In damp grounds. Common. florida, L. Not rare.

circinata, L'Her. Not common in Southern part of the county.

sericea, L. Common.

stolonifera, Michx. Sutton.

paniculata, L'Her. Common in thickets.

alternifolia, L. Very common by roadsides.

Nyssa, L. Tupelo.

multiflora, Wang. Occasional.

MONOPETALOUS EXOGENS.

CAPRIFOLIACEÆ.

Twin-flower. Linnæa, Gronov.

borealis, Gronov. Lunenburg, Kilburn.

LONICERA. L. Honeysuckle.

ciliata, Muhl. Not abundant. Auburn.

cærulea, L. Leicester.

DIERVILLA, Tourn. Bush-honeysuckle.

trifida, Moench. Common in woods.

Sambucus, Tourn. Elder.

Canadensis, L. Edges of thickets. Common.

pubens, Michx. Rocky woods. Rarer.

VIBURNUM, L. Arrow-wood.

Lentago, L. Occasional.

nudum, L. Common.

dentatum, L. Common in swampy thickets.

acerifolium, L. Common in upland thickets.

Opulus, L. Rare at the southern part of the county. lantanoides, Michx. Not common.

RUBIACEÆ.

GALIUM, L. Bedstraw.

asprellum, Michx. Common in low grounds.

trifidum, L. In dry woods.

triflorum, Michx. In similar situations with last.

circæzans, Michx. Thickets.

lanceolatum, Torr. Worcester, Miss Sargent.

CEPHALANTHUS, L. Button-bush. occidentalis, L. Common in swamps.

MITCHELLA, L. Partridge-berry.

repens, L. Common in woods.

Houstonia, L. Innocence or Bluets.

cœrulea, L. Very abundant in pastures.

COMPOSITÆ.

VERNONIA, Schreb. Ironweed.

Noveboracensis, Willd. In swampy pastures.

Liatris, Schreb.

scariosa, Willd. Sterling, Miss Seaver.

EUPATORIUM, Tourn. Thoroughwort.

ageratoides, L. In dry woods.

perfoliatum, L. In swampy thickets.

Low pastures. purpureum, L.

MIKANIA, Willd. Climbing Hempweed. scandens, L. Tatnuck, Kinney.

Tussilago, Tourn. Coltsfoot.

Farfara, L. Fitchburg, Mr. E. A. Hartwell.

Sericocarpus, Nees. White-topped Aster.

solidagineus, Nees. conyzoides, Nees. Common.

ASTER, L. Aster.

acuminatus, Michx. In woods and copses.

carneus, Nees. In upland pastures.

cordifolius, L. In dry woods.

corymbosus, Ait. With the last.

dumosus, L. In waste places.

lævis, L., var. cyaneus, Gray. In upland copses.

longifolius, Lam. In wet pastures.

macrophyllus, L. In copses.

miser, L., Ait. Roadsides and wastes.

multiflorus, Ait. In waste places. Novæ-Angliæ, L. In low grounds.

Worcester, Eaton. Novi-Belgii, L.

patens, Ait. Roadsides and dry grounds.

prenanthoides, Muhl. Grafton, Misses Putnam.

puniceus, L. In low meadows.

sagittifolius, Willd. In dry woods. simplex, Willd. North Worcester, Eaton.

Tradescanti, L. Roadsides.

In dry woods. undulatus, L.

ERIGERON, L. Fleabane.

> Canadense, L. Roadsides and waste places.

bellidifolium, Muhl. Pastures.

Philadelphicum, L.

In waste places. annuum, Pers.

With the last. strigosum, Muhl.

var. discoideum. Robbins. DIPLOPAPPUS, Cass. Double-bristled Aster. linariifolius, Hook. In dry woods. umbellatus, Torr. & Gray. In low grounds.

Solidago, D. Golden-rod.

altissima, L. In waste places.

arguta, Ait. Common. bicolor, L. In dry woods.

Canadensis, L. Edges of thickets.

cæsia, L. In dry woods.

elliptica, Ait. In swampy thickets.

gigantea, Ait. Edge of thickets.

lanceolata, L. In low grounds.

latifolia, L. In old woods.

Muhlenbergii, T. and Gray. Worcester, Eaton.

neglecta, T. and Gray. Greenville, Eaton.

nemoralis, Ait. In waste places.

odora, Ait. In dry woods.

serotina, Ait. Along walks and fences, etc. stricta, Ait. In wet places.

INULA, L. Elecampane.

Helenium, L. Common.

Ambrosia, Tourn. Ragweed.

artemisiæfolia, L. Very common.

RUDBECKIA, L. Cone-flower.

hirta, L. In meadows. Spreading.

Helianthus, L. Sunflower. annuus, L. Worcester, Eaton.

decapetalus, L. Common.

divaricatus, L. Common in thickets. strumosus, L. With the last. tuberosus, L. Escaped.

Bur-Marigold. Bidens, L.

frondosa, L. In low grounds.

connata, Muhl. In swampy places.

cernua, L. With the last.

chrysanthemoides, Michx. In pools.

MARUTA, Cass. Mayweed.

Cotula, DC. Very common.

ACHILLEA, L. Yarrow.

Millefolium, L. Very common.

LEUCANTHEMUM, Tourn. Ox-eye Daisy, White weed. vulgare, Lam. Meadows and pastures.

Tanacetum, L. Tansy. vulgare, L. Roadsides.

ARTEMISIA, L. Wormwood.

vulgaris, L. Worcester, Eaton. Absinthium, L. Worcester, Eaton.

GNAPHALIUM, L. Cudweed. decurrens, Ives.

Common in pastures. polycephalum, Michx. With the last.

uliginosum, L. In low grounds.

ANTENNARIA, Gærtn. Everlasting.

margaritacea, R. Br. Common. Pastures.

plantaginifolia, Hook. Very common.

Groundsel. Senecio, L.

aureus, L. Abundant in wet places.

CIRSIUM, Tourn. Thistle.

> lanceolatum, Scop. Common.

discolor, Spreng. Rare.

muticum, Michx. Worcester, Eaton.

horridulum, Michx. Southbridge, Mr. Ammidown. arvense, Scop. Too common.

LAPPA, Tourn. Burdock.

officinalis, Allioni. Roadsides, etc.

Cichorium, Tourn. Chicory. Intybus, L. Not rare.

Krigia, Schreber. Dwarf Dandelion.

Virginica, Willd. In upland woods and pastures.

Leontodon, L., Juss. Fall Dandelion.

autumnale, L. Common.

HIERACIUM, Tourn. Hawkweed.

Canadense, Michx. In copses.

scabrum, Michx. Common.

Gronovii, L. In dry woods.

venosum, L. In dry woods.

paniculatum, L. With the last.

Nabalus, Cass. Rattlesnake-root.

albus, Hook. In wet woods.

altissimus, Hook. With the last.

TARAXACUM, Haller. Dandelion.

> Dens-leonis, Desf. Very abundant.

Lactuca, Tourn. Lettuce.

Canadensis, L. In waste places.

MULGEDIUM, Cass. False Lettuce. leucophæum, DC. In clearings.

Sonchus, L. Sow-Thistle.

asper, Vill. In waste places, Eaton.

arvensis. L. In waste places.

LOBELIACEÆ.

LOBELIA, L. Lobelia.

cardinalis, L. Brooksides, edges of ponds, &c. syphilitica, L. Southbridge, Ammidown.

inflata, L. Common in low pastures.

spicata, Lam. Common.

Dortmanna, L. Lake Washacum, Sterling, Eaton.

CAMPANULACEÆ.

CAMPANULA, Tourn. Bell-flower.

aparinoides. Pursh. In wet grounds.

Specularia, Heister. Venus' Looking-glass. perfoliata, A.DC. Southbridge, Ammidown.

ERICACEÆ.

GAYLUSSACIA, H. B. K. Huckleberry.

frondosa, Torr. & Gray. Pastures.

resinosa, Torr. & Gray.

VACCINIUM, L. Cranberry, Blueberry, &c. corymbosum, L. with varieties. Common.

macrocarpon, Ait. In wet grounds. Oxycoccus, L. On floating island.

Pennsylvanicum, Lam. Common. vacillans, Solander.

CHIOGENES, Salisb. Creeping Snowberry.

hispidula, Torr. & Gray. In swamps. Auburn.

ARCTOSTAPHYLOS, Adans. Bearberry.

Uva-ursi, Spreng. On sandy knolls.

EPIGÆA, L. Mayflower. repens, L. Common.

GAULTHERIA, Kalm. Wintergreen, or Checkerberry. procumbens, L. Common.

LEUCOTHOE, Don. Leucothoe.

racemosa, Gray. Edge of pools.

Cassandra, Don. Leather-leaf.

calyculata, Don. In swampy grounds.

Andromeda, L. Andromeda. ligustrina, Walt. Thickets.

CLETHRA, L. White Alder.

alnifolia, L. Generally in low grounds.

Kalmia, L. Laurel.

latifolia, L. Common.

angustifolia, L. "

glauca, Ait. Northern part of the county.

AZALEA, L. Honeysuckle.

viscosa, L. In woods and pastures. nudiflora, L. With the last.

nudifiora, L. With the la Rhododendron, L. Rose-bay.

maximum, L. Swamps. Auburn.

Rhodora, Duhamel. Rhodora.

Canadensis, L. Swamps, and wet pastures. LEDUM, L. Labrador Tea.

latifolium, Ait. Hubbardston, Mr. G. B. Emerson.

Pyrola, Tourn. Wintergreen. rotundifolia, L. Common.

elliptica, Nutt. "chlorantha, Swartz."

secunda, L. Rarer.
Moneses, Salisb. One-flowered Pyrola.

uniflora, Gray. Fitchburg, Mr. E. A. Hartwell. Chimaphila, Pursh. Pipsissewa.

umbellata, Pursh. Pipsissewa.
umbellata, Nutt. Common in woods.
maculata, Pursh. With the last.

MONOTROPA. Indian Pipe.

uniflora, L. Common in dry woods. Hypopitys, L. With the last.

AQUIFOLIACEÆ.

ILEX, L. Holly.

verticillata, Gray. Common. lævigata, Gray. Swamps, Auburn.

NEMOPANTHES, Raf. Mountain Holly.

Canadensis, DC. Swamps, Auburn.

PLANTAGINACEÆ.

PLANTAGO, L. Plantain.

major, L. Common in waste grounds. lanceolata, L. In pastures, etc.

PRIMULACEÆ.

TRIENTALIS, L. Star-flower.

Americana, Pursh. In woods.

Lysimachia, Tourn. Loosestrife.

stricta; Ait. Common in low grounds.

quadrifolia, L. Common in dry woods, etc.

ciliata, L. In low grounds.

ciliata, L. In low ground lanceolata, Walt. Sutton.

Anagallis, Tourn. Pimpernel. arvensis, L.

LENTIBULACEÆ.

UTRICULARIA, L. Bladderwort. vulgaris, L. Pools.

BIGNONIACEÆ.

MARTYNIA, L. Unicorn-plant. proboscidea, Glox. Worcester, Eaton.

OROBANCHACEÆ.

Beech-drops. EPIPHEGUS, Nutt.

Virginiana, Bart. Ashburnham, Mr. J. E. Vose.

CONOPHOLIS, Wallroth. Squaw-root.

Americana, Wallroth. Ashburnham, Vose.

APHYLLON, Mitchell. Naked Broom-rape. uniflorum, Torr. and Gray. Common.

SCROPHULARIACEÆ.

VERBASCUM, L. Mullein.

Thapsus, L. Common in waste places. Blattaria, L. In pastures.

LINARIA, Tourn. Toad-flax.

Canadensis, Spreng.

vulgaris, Miller. Common.

CHELONE, Tourn. Snake-head.

glabra, L. In swampy places.

MIMULUS, L. Monkey flower.

ringens, L. In wet grounds.

GRATIOLA, L. Hedge Hyssop.

Virginiana, L. Lake Quinsigamond, Eaton. aurea, Muhl. Borders of ponds.

ILYSANTHES, Raf. False Pimpernel.

gratioloides, Benth. In wet places.

VERONICA, L: Speedwell.

scutellata, L. In low grounds.

serpyllifolia, L. In pastures. Common.

arvensis, L. In pastures. Rarer.

GERARDIA, L. Gerardia.

purpurea, L. In moist grounds.

tenuifolia, Vahl.

flava, L. Common in dry woods.

quercifolia, Pursh. In woods and thickets.

pedicularia, L. With the last.

Castilleia, Mutis. Painted-Cup. coccinea, Spreng. In wet meadows.

Pedicularis, Tourn. Lousewort. Canadensis, L. Common.

lanceolata, Michx.

MELAMPYRUM, Tourn. Cow-wheat. Americanum, Michx. Common.

VERBENACEÆ.

Vervain. VERBENA, L.

hastata, L. Common. urticifolia, L. Common.

Phryma, L. Lopseed.

Leptostachya, L. In copses.

LABIATÆ.

TRICHOSTEMA, L. Blue Curls. dichotomum, L. In sandy soil.

MENTHA, L. Mint.

viridis, L. In moist grounds. piperita, L. In swampy places.

arvensis, L. Canadensis, L.

LYCOPUS, L. Water Horehound.

Virginicus, L. In low grounds. With the last. Europæus, L.

CALAMINTHA, Mœnch.

Clinopodium, Benth.

HEDEOMA, Pers. Pennyroyal.

pulegioides, Pers. In upland pastures.

COLLINSONIA, L. Horse Balm.

Canadensis, L. Edge of thickets.

NEPETA, L. Catmint.

Cataria, L. In waste places.

Glechoma, Benth.

Brunella, Tourn. Self-Heal.

vulgaris, L. Common in low grounds.

Scutellaria, L. Skullcap.

galericulata, L. In low grounds. lateriflora, L. With the last.

GALEOPSIS, L. Hemp Nettle.

Tetrahit. L.

STACHYS, L. Hedge Nettle.

palustris, L. Tatnuck, Mr. Kinney.

LEONURUS, L. Motherwort.

Cardiaca, L. Common.

Lamium, L. Dead Nettle.

purpureum, L.

BALLOTA, L. Fetid Horehound. nigra, L. Fitchburg, Eaton.

BORRAGINACEÆ.

Echium, Tourn. Viper's Bugloss. vulgare, L. Southbridge, Ammidown.

SYMPHYTUM, Tourn. Comfrey.

officinale, L. Escaped from cultivation.

LITHOSPERMUM, Tourn. Gromwell. arvense, L.

Myosotis, L. Forget-me-not.

palustris, With., var. laxa, Grav. Spencer, Miss Tucker.

CYNOGLOSSUM, Tourn. Hound's Tongue.

officinale, L. Waste grounds. Virginicum, L. In rocky woods.

Thickets. Common. Morisoni, DC.

CONVOLVULACEÆ.

Convolvulus, L. Bindweed.

arvensis, L. Worcester, Eaton.

CALYSTEGIA, R. Br. Bracted Bindweed.

Sepium, R. Br. Waste places.

Cuscuta, Tourn. Dodder.

Gronovii, Willd. Low grounds.

SOLANACEÆ.

Nightshade. SOLANUM, Tourn.

Dulcamara, L. Common.

nigrum, L. Southbridge, Ammidown.

Physalis, L. Ground Cherry.

viscosa, L. Waste places.

DATURA, L. Jamestown-Weed.

Stramonium, L. Waste places.

Tatula. L. With the last.

GENTIANACEÆ.

GENTIANA, L. Gentian.

crinita, Fræl. Roadsides and pastures.

Andrewsii, Griseb. Roadsides.

MENYANTHES, Tourn. Buckbean. trifoliata, L. Sutton.

LIMNANTHEMUM.

lacunosum, Griseb. Lake Quinsigamond, Morong.

APOCYNACEÆ.

APOCYNUM, Tourn. Dogbane.

cannabinum, L. Copses. Rare.

androsæmifolium, L. With the last.

ASCLEPIADACEÆ.

ASCLEPIAS, L. Milkweed.

Cornuti. Very common.

incarnata, L. var. pulchra, Gray. Wet grounds.

obtusifolia, Michx. Sutton.

phytolaccoides, Pursh. Roadsides.

purpurascens, L. "
quadrifolia, Jacq. Rare, pastures.

tuberosa, L. Rare.

ACERATES, Ell. Green Milkweed.

viridiflora, Ell. Hitchcock, in Amherst Cat.

OLEACEÆ.

Fraxinus, Tourn. Ash.

Americana, L. Common.

sambucifolia, Lam. Rarer.

ARISTOLOCHIACEÆ.

Asarum, Tourn. Wild Ginger. Canadense, L.

PHYTOLACCACEÆ.

PHYTOLACCA, Tourn. Poke. decandra, L. Copses.

CHENOPODIACEÆ.

CHENOPODIUM, L. Pigweed.

album, L. Waste places.

hybridum, L. "

Botrys, L. Lunenburg, Kilburn.

AMARANTACEÆ.

AMARANTUS, Tourn. Amaranth.

hypochondriacus, L. Fitchburg, Eaton.

retroflexus, L. Common.

albus, L. ,,

POLYGONACEÆ.

Polygonum, L. Knotweed.

acre, H. B. K. Common. Worcester, Eaton.

arifolium, L. "

aviculare, L. Waste places.

cilinode, Michx. Low grounds.

convolvulus, L. Worcester, Eaton.

dumetorum, L. Gardner, Eaton.

Hydropiper, L. Common.

orientale, L. Escaped from cultivation.

Pennsylvanicum, L. Royalston, Eaton.

sagittatum, L. Swampy grounds.

tenue, Michx. Worcester, Eaton.

FAGOPYRUM, Tourn. Buckwheat. esculentum, Mænch. Occasional.

Rumex, L. Dock.

crispus, L. Common.

obtusifolius, L. Worcester, Eaton.

conglomeratus, Murr.

Acetosella. L.

LAURACEÆ.

Sassafras, Nees. Sassafras.

officinale, Nees. Common.

Lindera, Thunberg. Spice-Bush.

Benzoin, Meisner. Common.

THYMELACEÆ.

DIRCA, L. Leather-wood. palustris, L. Rare.

SANTALACEÆ.

COMANDRA, Nutt. Bastard Toadflax. Umbellata, Nutt. Common.

CALLITRICHACEÆ.

Callitriche, L. Water Starwort. verna, L. In brooks.

PODOSTEMACEÆ.

Podostemon, Michx. ceratophyllus, Michx. Uxbridge, Morong.

EUPHORBIACEÆ.

EUPHORBIA, L. Spurge.

Cyparissias, L. Common in waste places.

maculata, L. Railroad embankments.

ACALYPHA, L. Three-Seeded Mercury. Virginica, L. In waste grounds.

URTICACEÆ.

ULMUS, L. Elm.

fulva, Mich. Quite rare.

Americana, L. Very common.

URTICA, Tourn. Nettle.

gracilis, Ait. Very common.

dioica, L. In rich soil.

LAPORTEA. Gaudi. Wood Nettle.

Canadensis, Gaudi. In rich soil.

PILEA, Lindl. Richweed.

pumila, Gray. In waste places.

BOEHMERIA, Jacq. False Nettle.

cylindrica, Willd. In waste places.

HUMULUS, L. Hop.

Lupulus, L.

PLATANACEÆ.

PLATANUS, L. Buttonwood. occidentalis, L. Common.

JUGLANDACEÆ.

JUGLANS, L. Walnut.

cinerea, L. Quite common.

CARYA, Nutt. Hickory.

alba, Nutt. Common.

porcina, Nutt. "

amara, Nutt. Rarer.

CUPULIFERÆ.

Quercus, L. Oak.

alba, L. Common.

coccinea, Wang. Common.

66 var. tinctoria, Gray. Common.

ilicifolia, Wang. Common.

Prinus, L.

Prinus, L., var. monticola, Michx.

rubra, L.

CASTANEA, Tourn. Chestnut. vesca, L. Common.

Fagus, Tourn. Beech.

ferruginea, Ait. More abundant northward.

CORYLUS, Tourn. Hazel-nut.

Americana, Watt. Common.

rostrata, Ait.

OSTRYA, Micheli. Hop Hornbeam.

Virginica, Willd. Not very common.

CARPINUS, L. Hornbeam.

Americana, Michx. Common.

MYRICACEÆ.

Myrica, L. Bayberry.

Gale, L. Edge of ponds.

cerifera, L. Roadsides and thickets. Comptonia, Soland. Sweetfern.

asplenifolia, Ait. Upland pastures, etc.

BETULACEÆ.

BETULA, Tourn. Birch.

> lenta, L. Common.

lutea, Michx. f. Not so common as last.

alba, var. populifolia, Spach. Very common.

papyracea, Ait. Rare in southern part of the country.

ALNUS, Tourn. Alder.

incana, Willd. Common.

serrulata, Ait. Rare.

SALICACEÆ.

SALIX, Tourn. Willow.

cordata, Muhl. Worcester, Eaton. discolor, Muhl. Common.

fragilis, L. Worcester, Eaton.

humilis, Marshall. Not common.

lucida, Muhl. Edge of ponds. myrtilloides, L. Leicester.

nigra, Marsh. Worcester.

sericea, Marsh. Common.

tristis, Ait. Uxbridge, Morong.

Populus, Tourn. Poplar. tremuloides, Michx.

Common. grandidentata, Michx. Common. balsamifera, L. var. candicans, Gray. Rare.

CONIFERÆ.

Pinus, Tourn. Pine.

rigida, Miller. Common.

mitis, Michx. Southbridge, Ammidown. resinosa, Ait. Templeton, Parkhurst.

strobus, L. Common.

ABIES, Tourn. Spruce.

nigra, Poir. Not common. Canadensis, Michx. Common.

LARIX, Tourn.

Americana, Michx. Gardner.

THUJA, Tourn. Arbor Vitæ.

occidentalis, L. Swamps.

CUPRESSUS, Tourn. Cypress.

thyoides, L. Swamps. Auburn.

JUNIPERUS, L. Juniper.

Virginiana, L. Pastures.

Taxus, Tourn. Yew.

baccata, L., var. Canadensis, Gray. Pastures.

ARACEÆ.

Arisæma, Martius. Indian Turnip.

triphyllum, Torr. Very common.

PELTANDRA, Raf. Arrow Arum. Virginica, Raf. Rare.

Calla, L. Wild Calla.

palustris, L. Swamps.

SYMPLOCARPUS, Salisb. Skunk Cabbage. fætidus, Salisb. Swamps. Common.

Acorus, L. Sweet Flag.

Calamus, L. Wet grounds.

LEMNACEÆ.

LEMNA, L. Duckweed.

polyrrhiza, L. Pools, Webber.

TYPHACEÆ.

Түрна, Tourn. Cat-tail.

latifolia. Common in ponds.

Sparganium, Tourn. Bur-reed. eurycarpum, Engelm. Common.

NAIADACEÆ.

NAIAS, L. Naiad.

flexilis, Rostk. Lake Quinsigamond, Morony. Indica, var. gracillima Braun. "

POTAMOGETON, Tourn. Pondweed.

amplifolius, Tuck. Lake Quinsigamond, etc. Claytonii, Tuck. Common in streams and ponds. gramineus, L. Lake Quinsigamond.

" var. myriophyllus, Robbins. Lake

Quinsigamond.

hybridus, Michx. Common. lonchites, Tuck, Miss Sargent.

natans, L. Very common.

" var. prolixus, Koch. Very common.

Oakesianus, Robbins. Uxbridge. obtusifolius, M. and K. Beaver Brook, Worcester.

pauciflorus, Pursh. Lake Quinsigamond. pusillus, L. Common.

pusillus, L., var. vulgaris, Fries. Common.

pusillus, L., var. tenuissimus, M. and K. Common.

gemmiparus, Robbins. Uxbridge. Robbinsii, Oakes. Lake Quinsigamond.

Spirillus, Tuck. Common.

Tuckermani, Robbins. In Shockalog Pond, Ux-bridge.

Vaseyi, Robbins. Lake Quinsigamond.

ALISMACEÆ.

ALISMA, L. Water-Plantain.

Plantago, L., var. Americanum, Gray. Common.

SAGITTARIA, L. Arrow-Head.

variabilis, Engelm. Common.

HYDROCHARIDACEÆ.

Anacharis, Richard. Water-weed. Canadensis, Pl. Streams, Webber.

ORCHIDACEÆ.

Orchis, L. Orchis. spectabilis, L. Ashburnham.

HABENARIA, Willd. Rein-Orchis.

fimbriata, R. Br. Rare.

Hookeri, Torr. In old woods.

lacera, R. Br. In low grounds.

orbiculata, Torr. Northern part of county.

psycodes, Grav. Rare.

virescens, Spreng. In wet meadows.

GOODYERA, R. Br. Rattlesnake Plantain.

repens, R. Br. In old woods. Rare.

pubescens, R. Br. Common.

Spiranthes, Richard. Ladies' Tresses.

cernua, Richard. In low grounds. Common. graminea, Lindl., var. Walteri, Gray.

gracilis, Big. In dry grounds.

Arethusa, Gronov. Arethusa.

bulbosa, L. Rare. Pogonia, Juss. Pogonia.

ophioglossoides, Nutt. Common in wet grounds.

verticillata, Nutt. Rare. CALOPOGON, R. Br. Calopogon.

pulchellus, R. Br. Common.

Adder's Mouth. Microstylis, Nutt.

ophioglossoides, Nutt. Rare. Auburn.

LIPARIS, Richard. Twayblade.

liliifolia, Richard. Rare.

Læselii, Richard. Spencer, Miss Tucker.

CORALLORHIZA, Haller. Coral-root.

innata, R. Br. Swamps.

odontorhiza, Nutt. Southbridge, Ammidown.

multiflora, Nutt. In dry woods.

CYPRIPEDIUM, L. Lady's Slipper.

parviflorum, Salisb. pubescens, Willd.

spectabile, Swartz. Ashburnham, Vose.

Also, a white variety!! acaule, Ait. Common.

AMARYLLIDACEÆ.

Hypoxys, L. Star-grass. erecta, L. Common.

HÆMODORACEÆ.

ALETRIS, L. Colic-root. farinosa, L. Not common.

IRIDACEÆ.

Iris, L. Flower-de-Luce.

versicolor, L. Common.

Sisyrinchium, L. Blue-eyed Grass.

Bermudiana, L. Common.

SMILACEÆ.

SMILAX, Tourn. Greenbrier.

rotundifolia, L. In copses.

herbacea, L. Roadsides, etc.

LILIACEÆ.

TRILLIUM, L. Trillium.

erectum, L. In rich woods.

cernuum, L. Swampy grounds.

erythrocarpum, Michx. Swamps.

Medeola, Gronov. Cucumber-root. Virginica, L. Common in rich woods.

VERATRUM. Tourn. Hellebore. viride, Ait. Common.

UVULARIA, L. Bellwort.

perfoliata, L. Common.

sessilifolia, "STREPTOPUS, Michx. Twisted-Stalk.

roseus, Michx. Rare.

CLINTONIA, Raf. Clintonia. borealis, Raf. Common.

Smilacina, Desf. False Solomon's Seal.

racemosa, Desf. Common.

trifolia, Des. Ashburnham, Vose.

bifolia, Ker. Common.

Polygonatum, Tourn. Solomon's Seal. biflorum, Ell. Very common.

LILIUM, L. Lily.

Philadelphicum, L. In thickets.

Canadense, L. In wet meadows.

superbum, L. Southbridge, Ammidown.

ERYTHRONIUM, L. Dog's Tooth Violet.

Americanum, Smith. Low grounds.

Ornithogalum, Tourn. Star-of-Bethlehem.

umbellatum, L. Escaped from cultivation.

ALLIUM, L. Onion. Garlic.

Canadense, Kalm. Common.

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JUNCACEÆ.

LUZULA, DC. Wood Rush.

pilosa, Willd. Mt. Wachusett.

parviflora, Desv., var. melanocarpa, Gray. Mt. Wachusett, Eaton.

campestris, DC. Common.

Juncus, L. Rush.

acuminatus, Michx. Common.

effusus, L.

tenuis, Willd.

militaris, Bigel. Uxbridge. Morong.

PONTEDERIACEÆ.

Pontederia, L. Pickerel-weed. cordata, L. Edges of ponds. Common.

XYRIDACEÆ.

XYRIS. Yellow-eyed Grass. flexuosa, var. pusilla, Muhl. Grav.

ERIOCAULONACEÆ.

ERIOCAULON, L. Pipewort. septangulare, With. Margin of ponds.

CYPERACEÆ.

CYPERUS, L. Galingale.

> dentatus, Torr. Margin of ponds.

filiculmis, Vahl. Dry soil.

strigosus, L. Swamps.

Dulichium, Richard. Dulichium.

spathaceum, Pers. Swamps.

Spike Rush. ELEOCHARIS, R. Br.

acicularis, R. Br. Eaton.

obtusa, Schultes. Swamps.

palustris, R. Br. Ponds.

tenuis, Schultes. Margin of ponds.

Scirpus, L. Bulrush.

atrovirens, Muhl. Wet places.

Eriophorum, Michx. Swamps. polyphyllus, Vahl. Worcester.

Eaton.

validus, Vahl. Ponds and Streams.

ERIOPHORUM. L. Cotton-Grass.

alpinum, L. Groton, Eaton. Virginicum, L. Common. polystachyon, L., var. latifolium, Gray. Common. gracile, Koch. Common.

FIMBRISTYLIS, Vahl.

autumnalis, R. & S. Low grounds. capillaris, Gray. With the last.

RHYNCHOSPORA, Vahl. Beak-Rush. glomerata, Vahl. Swamps.

CAREX, L. Sedge.

bromoides, Schk. Swampy woods. bullata, Schk. Wet Meadows.

canescens, L. 'cephaloidea, Dewey. '

cephalophora, Muhl. "

comosa, Boott. Edge of ponds.

conoidea, Schk. crinita, Lam.

cristata, Schw. Worcester, Eaton.

debilis, Michx. Swamps.

Deweyana, Schw. Worcester, Eaton.

filiformis, L. Worcester.

flava, L.

folliculata, L. Common.

gracillima, Schw. "

grisea, Wahl. Brooks.

intumescens, Rudge. Meadows.

lanuginosa, Michx. Worcester, Eaton.

laxiflora, Lam. Woods.

lupulina, Muhl. Swamps. miliacea, Muhl. Woods.

monile, Tuck. Meadows.

monile, Tuck. Meadows

pallescens, L. "

Pennsylvanica, Lam. Common. polytrichoides, Muhl. Swamps.

Pseudo-Cyperus, L. Fitchburg, Eaton.

riparia, Curtis. Swamps.

rosea, Schk. Meadows.

scoparia, Schk.

sparganioides, Muhl. Meadows.

stellulata, L., var. scirpoides, Boott. Meadows.

stipata, Muhl. Roadsides, &c.

straminea, Schk. Eaton.

stricta, Lam. Wet Meadows.

tentaculata, Muhl.

teretiuscula, Good. Worcester, Eaton.

tetanica, Schk. Wet Meadows. Woods. triceps, Michx. trichocarpa, Muhl. Worcester, Eaton. trisperma, Dew. Swamps. umbellata, Schk. Meadows. varia, Muhl. Worcester, Eaton. vestita, Willd. Pastures, &c. vulpino dea, Michx. Meadows, &c. Willdenovii, Schk. Worcester, Eaton.

GRAMINEÆ.

Leersia, Solander. White Grass. oryzoides, Swartz. Swamps.

ALOPECURUS, L. Foxtail-Grass.

aristulatus, Michx. Swamps.

Phleum, L. Cat's-tail-Grass. pratense, L. Meadows.

VILFA, Adans. Rush-Grass. vaqinæflora, Torr. Pastures.

Agrostis, L. Bent-Grass.

perennans, Tuck. Pastures.

scabra, Willd. Pastures.

vulgaris, With. Meadows.

alba, L. "

CINNA, L. Wood Reed-Grass. arundinacea, L. Woods.

Muhlenbergia, Schreber. Drop-seed Grass. sylvatica, Torr. & Gray. Copses.

Brachyelytrum, Beauv.

aristatum, Beauv. Copses.

CALAMAGROSTIS, Adans. Reed Bent-Grass.

Canadensis, Beauv. Meadows. Oryzopsis, Michx. Mountain-Rice.

asperifolia, Michx. Mt. Wachusett. Canadensis, Torr. West Boylston, Eaton.

STIPA, L. Feather-Grass.

Richardsonii, Link. Mt. Wachusett, Eaton.

DACTYLIS, L. Orchard-Grass.

glomerata, L. Orchards, &c.

GLYCERIA, R. Br. Manna-Grass.

Canadensis, Trin. Wet Meadows.

obtusa, Trin. nervata, Trin.

fluitans, R. Br. Worcester, Eaton.

acutiflora, Torr. Swamps.

Poa, L. Meadow-Grass.

annua, L. Common.

serotina, Ehrh. Meadows.

Eragrostis, Beauv. Eragrostis. pectinacea, Gr. Pastures.

Briza, L. Quaking-Grass. media, L. Pastures.

Festuca, L. Fescue-Grass. elatior, L. Meadows.

Bromus, L. Brome-Grass. ciliatus, L. Pastures.

LOLIUM, L. Darnel.

perenne, L. Waste places.

Triticum, L. Wheat. repens. Waste places.

Elymus, L. Wild Rye.

Virginicus, L. Swamps.

GYMNOSTICHUM, Schreb. Bottle-brush Grass. *Hystrix*, Schreb. Worcester, *Eaton*.

Danthonia, DC. Wild Oat-Grass.

spicata, Beauv. Pastures.
ARRHENATHERUM, Beauv. Oat-Grass.

avenaceum, Beauv. Lunenburg, Kilburn.

Holcus, L. Soft-Grass.

lanatus, L. Meadows.

Anthoxanthum, L. Sweet Vernal-Grass. odoratum, L. Meadows.

PASPALUM, L. Paspalum.

setaceum, Michx. Pastures.

Panicum, L. Panic-Grass.

agrostoides, Spreng. Sandy margins of ponds. capillare, L. Waste grounds.

Crus-galli, L.

depauperatum, Muhl. Pastures. glabrum, Gaudin. "

latifolium, L. Woods.

sanguinale, L. Pastures, &c.

SETARIA, Beauv. Bristly Fox-tail Grass.

glauca, Beauv. Roadsides, &c.

viridis, Beauv. "

CENCHRUS, L. Hedgehog-Grass. tribuloides, L. Sandy soil.

Andropogon, L. Beard-Grass.

furcatus, Muhl. Railroads.

scoparius, Michx. Poor soil.

Virginicus, L. Along B., B. & G. R. R., Eaton. Sorghum, Pers. Broom-Corn. nutans, Gray. Woods.

CRYPTOGAMOUS PLANTS.

ACROGENS.

EQUISETACEÆ.

Equisetum, L. Horse-tail.

arvense, L. Very common.

sylvaticum, L. Copses.

limosum, L. Swampy places.

FILICES.

Polypodium, L. Polypody. vulgare, L. Common.

PTERIS, L. Brake.

aquilina, L. Common.

ADIANTUM, L. Maidenhair. pedatum. L. Common.

ASPLENIUM, L. Spleenwort.

Trichomanes, L. Rare. ebeneum, Ait. Common.

thelypteroides, Michx. Common.

Filix-famina, Bernh.

Phegopteris, Fée. Beech Fern. polypodioides, Fée. Leicester, Eaton.

hexagonoptera, Fée. Rocky woods. Dryopteris, Fée. Leicester, Eaton.

ASPIDIUM, Swartz. Wood Fern.

acrostichoides, Swz. Common. Thelypteris, Swz.

Noveboracense, Swz.

spinulosum, Swz. cristatum, Swz.

" var. Clintonianum. Worcester,

Eaton.

Goldianum, Hook. Spencer, Miss Tucker. marginale, Swz. Common.

STRUTHIOPTERIS, Willd. Ostrich Fern. Germanica, Willd. Worcester, Eaton.

ONOCLEA, L. Sensitive Fern. sensibilis, L. Common.

Woodsia, R. Br. Woodsia.

Ilvensis, R. Br. Spencer, Miss Tucker.

Dicksonia, L'Her. Dicksonia.

punctilobula, Kunze. Common.

Lygodium, Swz. Climbing-Fern.
palmatum, Swz. Rare, Uxbridge, Oxford.

Osmunda, L. Flowering Fern.
reyalis, L. Common.
Claytoniana, L. "
cinnamomea, L. "

Botrychium, Swartz. Moonwort.

Virginicum, Swartz. Woods.

lunarioides, Swz. var. obliquum. Pastures.

"" dissectum.

Ophioglossum, L. Adder's Tongue. vulgatum, L. Spencer, Miss Tucker.

LYCOPODIACEÆ.

Lycopodium, L. Club-Moss.

lucidulum, Michx. Woods.

dendroideum, Michx. Woods and pastures.

clavatum, L. Woods.

complanatum, L. Woods and pastures.

Selaginella, Beauv.

SELAGINELLA, Beauv. apus, Spring. Southbridge, Ammidown.

A LIST OF THE TREES, SHRUBS AND EVER-GREEN FLOWERING PLANTS GROWING NATURALLY IN WORCESTER COUNTY, MASSACHUSETTS.

It is now thirty-seven years since agreeably to an order of the legislature a Report on the Trees and Shrubs growing naturally in the Forests of Massachusetts, prepared by the late George B. Emerson, was published. Copies of the first edition of this Report are scarce and rarely offered for sale. A few years since a revised edition in two volumes, illustrated with many plates, was issued by a Boston house, but at a price which practically restricts the ownership of the work to a few persons. Copies of one or the other edition are probably to be found in nearly every public library in the county, and there nearly every plant in this list is fully described and many of them figured.

In the following list the evergreen flowering plants are included with the trees and shrubs because they form a permanent part of the forest. When the deciduous trees and shrubs have shed their leaves in the late autumn, the bright green of the Epigæa, Chimaphila, Pyrola, Mitchella, Chiogenes and Gaultheria still carpet the forest floor. A glance at the one hundred and fifty-eight species of the list will suffice to show the wealth of our county in the variety of forms. Many of them are to be found in every town. They are of equal interest to all men, as furnishing so many additions to their comforts. It is our hope that this list may add somewhat to the knowledge of the woods of Worcester County.

[NOTE. As the localities of all the species of the list have been already given in preceding pages, it is not thought necessary to repeat them here.]

- 1. Abies Canadensis, *Michx*. (Gray's Manual.)

 Tsuga Canadensis, *Cariere*. Hemlock Spruce.
- 2. Abies nigra, *Poir*. (Gray's Manual.)
 Picea nigra, *Link*. Black Spruce.
- 3. Acer dasycarpum, Ehrh. White Maple.
- 4. Acer Pennsylvanicum, L. Striped Maple.
- 5. Acer rubrum, L. Red Maple.
- 6. Acer saccharinum, L. Sugar Maple.
- 7. Acer spicatum, Lam. Mountain Maple.
- 8. Alnus incana, Willd. Speckled Alder.
- 9. Alnus serrulata, Ait. Smooth Alder.
- 10. Amelanchier Canadensis, Torr & Gray. Shad Bush.
- 11. Ampelopsis quinquefolia, Michx. Virginia Creeper.
- 12. Andromeda ligustrina, Muhl. Andromeda.
- 13. Aralia hispida, Michx. Wild Elder.
- 14. Arctostaphylos Uva-ursi, Spreng. Bearberry.
- 15. Azalea nudiflora, L. (Gray's Manual.)
 Rhododendron nudiflorum, Torr. Swamp Pink.
- 16. Azalea viscosa, L. (Gray's Manual.)
 Rhododendron viscosum, Torr. Swamp Honeysuckle.
- 17. Berberis vulgaris, L. Barberry.
- 18. Betula alba, var. populifolia, Spach. White Birch.
- 19. Betula lenta, L. Black Birch.
- 20. Betula lutea, Michx., f. Yellow Birch.
- 21. Betula papyracea, Ait. Paper Birch.
- 22. Carpinus Americana, Michx. Ironwood.
- 23. Carya alba, Nutt. Shagbark.
- 24. Carya amara, Nutt. Bitternut.
- 25. Carya porcina, Nutt. Pignut.
- 26. Cassandra calyculata, Don. Leatherleaf.
- 27. Castanea vesca, L. Chestnut.
- 28. Ceanothus Americanus, L. New Jersey Tea.
- 29. Celastrus scandens, L. Climbing Bittersweet.
- 30. Cephalanthus occidentalis, L. Button Bush. (For Chamæcyparis sphæroidea, Spach., see No.
 - 47.)
 Chimaphila maculata, *Pursh*. Spotted Wintergreen.
- 32. Chimaphila umbellata, Nutt. Prince's Pine.
- 33. Chiogenes hispidula, Torr. & Gray. Snowberry.
- 34. Clethra alnifolia, L. White Alder.
- 35. Comptonia asplenifolia, Ait. Sweet Fern.
- 36. Coptis trifolia, Salisb. Gold-thread.
- 37. Cornus alternifolia, L. Dogwood.
- 38. Cornus Canadensis, L. Bunchberry.

31.

- 39. Cornus circinata, L'Her. Round-leaved Cornel.
- Cornus florida, L. Flowering Dogwood. **40.**
- Cornus paniculata, L'Her. 41. Panicled Cornel.
- 42. Cornus sericea, L. Silky Cornel.
- 43. Cornus stolonifera, Michx. Osier.
- 44. Corylus Americana, Walt. Hazel.
- 45. Corylus rostrata, Ait. Beaked Hazel.
- 46. Cratægus coccinea, L. Thorn.
- 47. Cupressus thyoides, L. (Gray's Manual.) Chamæcyparis sphæroidea, Spach. White Cedar.
- Diervilla trifida, Mænch. Three-flowered Honey-**48.** suckle.
- 49. Dirca palustris, L. Leatherwood.
- 50. Epigæa repens, L. Trailing Arbutus.
- 51. Fagus ferruginea, Ait. Beech.
- **52.** Fraxinus Americana, L. White Ash.
- 53. Fraxinus sambucifolia, Lam. Black Ash.
- 54. Gaultheria procumbens, L. Checkerberry.
- Gaylussacia frondosa, Torr. & Gray. Dangleberry. Gaylussacia resinosa, Torr. & Gray. Whortleberry. 55.
- 56.
- 57. Hamamelis Virginica, L. Witch-hazel.
- Ilex lævigata, Gray. Smooth Holly. 58.
- Ilex verticillata, Gray. Black Alder. 59.
- Juglans cinerea, L. Butternut. 60.
- 61. Juniperus communis, L. Juniper.
- Juniperus Virginiana, L. Red Cedar. Kalmia angustifolia, L. Lambkill. 62.
- 63.
- 64. Kalmia glauca, Ait. Smooth Laurel.
- 65. Kalmia latifolia, L. Laurel.
- 66. Larix Americana, Michx. Larch.
- 67. Ledum latifolium, Ait. Labrador Tea.
- 68. Leucothoë racemosa, Gray. Leucothoe.
- 69. Lindera Benzoin, Meisner. Spice Bush.
- Linnæa borealis, Gronov. Twin-flower. 70.
- 71. Lonicera ciliata, Muhl. Fly Honeysuckle. 72. Lonicera cœrulea, L. Honeysuckle.
- Mitchella repens, L. Partridge-berry. 73.
- 74. Morus alba, L. White Mulberry.
- Myrica cerifera, L. Waxberry. 75.
- 76. Myrica Gale, L. Sweet Gale.
- 77. Nemopanthes Canadensis, DC. Mountain Holly.
- 78. Nyssa multiflora, Wang. Tupelo.
- Ostrva Virginica, Willd. Hop Hornbeam. 79.
- (For Picea nigra, Link, see No. 2.) 80. Pinus mitis, Michx. Yellow Pine.

- 81. Pinus resinosa, Ait. Red Pine.
- 82. Pinus rigida, Miller. Pitch Pine.
- 83. Pinus Strobus, L. White Pine.
- 84. Platanus occidentalis, L. Buttonwood.
- 85. Populus grandidentata, Michx. Large-toothed Poplar.
- 86. Populus tremuloides, Michx. Poplar.
- 87. Prunus Pennsylvanica, L. Red Cherry.
- 88. Prunus serotina, Ehrh. Black Cherry.
- 89. Prunus Virginiana, L. Choke Cherry.
- 90. Pyrola chlorantha, Swartz. Pyrola.
- 91. Pyrola elliptica, Nutt. Shin-leaf.
- 92. Pyrola rotundifolia, L. Wintergreen.
- 93. Pyrola secunda, L. Pyrola.
- 94. Pyrus Americana, DC. Mountain Ash.
- 95. Pyrus arbutifolia, L. Chokeberry.
- 96. Quercus alba, L. White Oak.
- 97. Quercus coccinea, Wang. Scarlet Oak.
- 98. Quercus coccinea, var. tinctoria, Gray. Black Oak.
- 99. Quercus ilicifolia, Wang. Scrub Oak.
- 100. Quercus Prinus, L. Chestnut Oak.
- 101. Quercus Prinus, var. monticola, Michx. Rock Chestnut Oak.
- 102. Quercus rubra, L. Red Oak.
- 103. Rhamnus catharticus, L. Buckthorn.
- 104. Rhododendron maximum, L. Rhododendron.

 (For Rhododendron nudiflorum, Torr. See No. 15.)

 (For "Rhodora, Don. See No. 105.)

(For "viscosum, Torr. See No. 16.)

- 105. Rhodora Canadensis, L. (Gray's Manual.) Rhododendron Rhodora, Don. Rhodora.
- 106. Rhus copallina, L. Dwarf Sumach.
- 107. Rhus glabra, L. Smooth Sumach.
- 108. Rhus Toxicodendron, L. Poison Ivy.
- 109. Rhus typhina, L. Staghorn Sumach.
- 110. Rhus venenata, DC. Poison Dogwood.

Nos. 108 and 110 are the only two plants of this region poisonous to the touch; and these do not affect all persons.

- 111. Ribes Cynosbati, L. Gooseberry.
- 112. Ribes hirtellum, *Michx*. (Gray's Manual.)
 Ribes oxycanthoides. *L*. Gooseberry.
- Ribes oxycanthoides, L. Gooseberry.

 113. Ribes prostratum, L'Her. Fetid Currant.
- 114. Ribes rotundifolium, Michx. Gooseberry.
- 115. Rosa Carolina, L. Swamp Rose.
- 116. Rosa lucida, Ehrh. Wild Rose.

- 117. Rosa rubiginosa, L. Sweet Brier.
- 118. Rubus Canadensis, L. Blackberry.
- 119. Rubus hispidus, L. Blackberry.
- 120. Rubus occidentalis, L. Thimbleberry.
- 121. Rubus odoratus, L. Flowering Raspberry.
- 122. Rubus strigosus, Michx. Raspberry.
- 123. Rubus triflorus, Rich. Swamp Blackberry.
- 124. Rubus villosus, Ait. High Blackberry.
- 125. Salix cordata, Muhl. Heart-leaved Willow.
- 126. Salix discolor, Muhl. Glaucous Willow.
- 127. Salix fragilis, L. Brittle Willow.
- 128. Salix lucida, Muhl. Shining Willow.
- 129. Salix humilis, Marshall. Prairie Willow.
- 130. Salix myrtilloides, L. Myrtle Willow.
- 131. Salix nigra, Marsh, var. falcata. (Gray's Manual.)
- 132. Salix sericea, Marsh. Silky Willow.
- 133. Salix tristis, Ait. Dwarf Willow.
- 134. Sambucus Canadensis, L. Common Elder.
- 135. Sambucus pubens, Michx. Red-berried Elder.
- 136. Sassafras officinale, Nees. Sassafras.
- 137. Smilax rotundifolia, L. Green brier.
- 138. Spiræa salicifolia, L. Meadow sweet.
- 139. Spiræa tomentosa, L. Hardhack.
- 140. Taxus baccata, L. var. Canadensis, Gray. Ground Yew.
- 141. Thuja occidentalis, L. Arbor Vitæ.
- 142. Tilia Americana, L. Basswood.
 (For Tsuga Canadensis, Cariere, see No. 1.)
- 143. Ulmus Americana, L. Common Elm.
- 144. Ulmus fulva, Michx. Slippery Elm.
- 145. Vaccinium corymbosum, L. High Blueberry.
- 146. Vaccinium macrocarpon, Ait. Cranberry.
- 147. Vaccinium Oxycoccus L. Small Cranberry.
- 148. Vaccinium Pennsylvanicum, Lam. Dwarf Blueberry.
- 149. Vaccinium vacillans, Solander. Low Blueberry.
- 150. Viburnum acerifolium, L. Maple-leaved Viburnum.
- 151. Viburnum dentatum, L. Arrow-wood.
- 152. Viburnum lantanoides, Michx. Hobble-bush.
- 153. Viburnum Lentago, L. Sweet Viburnum.
- 154. Viburnum nudum, L. Withe-rod.
- 155. Viburnum Opulus, L. Cranberry-tree.
- 156. Vitis cordifolia, Michx. Frost Grape.
- 157. Vitis Labrusca, L. Fox Grape.
- 158. Zanthoxylum Americanum, Miller. Prickly Ash.

The following species are found in cultivation.

Abies alba, Michx. Picea nigra, Link. White Spruce.

Abies balsamea, Marshall. Balsam Fir.

Abies excelsa, DC. Norway Spruce.

Æsculus Hippocastaneum, L. Horse Chestnut.

Ailanthus glandulosus, *Desf.* Tree of Heaven. Catalpa bignonioides, *Walt*. Catalpa.

Liriodendron Tulipifera, L. Tulip-tree.

Juglans nigra, L. Black Walnut. Populus dilatata, L. Lombardy Poplar.

Populus balsamifera, L. var. candicans. Balm of Gilead.

Populus monilifera, Ait. Cottonwood.

Syringa vulgaris, L.

By including less common species the list might be indefinitely extended.

Worcester Natural History Society,

(Worcester Lyceum and Natural History Association.)

FOSTER ST., - WORCESTER, MASS.

INCORPORATED 1852.

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MEETINGS.

Free Public Meetings are held on the second Saturday evening of each month, for the transaction of general business, the admission of new members, and especially for popular discussions, by lectures, essays and otherwise, of interesting topics in the various departments of natural history. Field meetings and excursions are also arranged during the warmer months, which afford excellent opportunities for collecting and comparing specimens, visiting localities of special interest, interchange of facts and views, and the general enjoyment of out-door nature. Annual Meeting in April.

CLASSES.

Classes are formed, free to members of the society during the winter season, in such branches of natural science as seems from time to time most important and attractive, meeting weekly as a rule, and instructed by thoroughly competent teachers. The courses include from ten to twenty lessons each, and are designed to exemplify the best methods of modern scientific study. It is the desire of the Directors to establish a Summer school of Natural History provided a suitable site for the necessary buildings can be obtained and funds sufficient to enable them to carry on the work successfully can be raised. An experimental Summer's work, under the direction of Prof. A. Y. Bergen, Jr., has fully demonstrated the demand for, and value of, such a school in our city.

The following list of recent classes, and instructors, will show something of the scope and character of this feature of the society's work:—

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The society also affords to individual students, upon application to the Custodian, facilities for the pursuit of special investigations and researches.

During the past four years there have been enrolled in the various classes 931 pupils.

MUSEUM. No. 11 FOSTER STREET.

The museum is perhaps the most conspicuous and generally attractive feature of the society, consisting of illustrative specimens in every department of natural history, systematically arranged in convenient cases and cabinets, occupying three rooms, and always accessible to visitors and students. It embraces a separate Worcester County collection, exhibiting, as far as practicable, the life history of the objects of nature to be found in the immediate vicinity, and also a general synoptic collection illustrating natural classification.

During the hours from 9 A. M. to 5 P. M. the museum is open daily, with a competent custodian in charge, whose services, as a teacher and guide, are placed freely at the disposal of the public.

There has been an average attendance of seventy people a day or over twenty thousand visitors to the museum during the past year.

READING-ROOM AND PARLOR.

Connected with the museum and lecture-room are two other rooms, recently made comfortable and attractive through the liberality of friends of the society, and devoted respectively to reading and conversation.

Members and visitors seeking knowledge are at all times welcome to these rooms. Reference-books, periodicals, monographs, etc., bearing upon scientific subjects, are always at hand to be freely used by all.

MEMBERSHIP.

Any resident of Worcester County over fourteen years of age may become a member of this society.

The fees for membership and the annual dues are two dollars for gentlemen, one dollar for ladies, and fifty cents for pupils attending school.

The special privileges of membership are; a voice in managing the affairs of the society, free admission to all its classes, and the opportunity of examining or taking from the rooms books of reference, charts and specimens. It may be added that a large membership is desired, inasmuch as the society derives from the fees of its members a substantial portion of its yearly income. Since 1880 over 1,200 names have been placed on its rolls.

INVITATION.

Not only students and inquirers, but citizens, casual visitors, children with suitable guardians—the whole public—will find a cordial welcome in the rooms of the society.

Without endowment, and with a limited income, the society has been enabled to do its work during the past four years through the generosity and public spirit of our teachers, who have given their best service without pay, and by the liberality of many of our citizens, who, appreciating the value of the work, have, from year to year, aided by their subscriptions in meeting the various expenses of the society. Those who have followed for the past half-century the history of the Philadelphia Academy, the Boston Society of Natural History, and other kindred institutions, naturally, and not without reason, look forward in the future history of the Worcester Natural History Society to the probable munificence of a Thomas Bellerby Wilson, or a William J. Walker, to enable it to extend its usefulness, and to preserve, as well as increase, its already valuable collections.



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